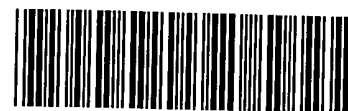


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0507

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PATENT APPLICATION: US/10/051,307

DATE: 05/02/2002

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3 <110> APPLICANT: DAI, ZIYU
4     SHI, LIFANG
5     HOOKER, BRIAN S.
7 <120> TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF
9 <130> FILE REFERENCE: 059440/0141
11 <140> CURRENT APPLICATION NUMBER: 10/051,307
12 <141> CURRENT FILING DATE: 2002-01-22
14 <150> PRIOR APPLICATION NUMBER: 60/263,224
15 <151> PRIOR FILING DATE: 2001-01-23
17 <160> NUMBER OF SEQ ID NOS: 14
19 <170> SOFTWARE: PatentIn Ver. 2.1
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22 <211> LENGTH: 1595
23 <212> TYPE: DNA
24 <213> ORGANISM: Solanum tuberosum
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29 caaatgtggt acaaggattg ttacatcctc cgggtacttt aagttgacca gggcattcac 180
30 catttatatt tgccgtgcat tgaattgtgt ggcatttccc tccacttgga ttagtcgggg 240
31 cgaaagtcac cggatatatta aatccatcaa ctaaagaaat gtcccagaaa tctaagttgt 300
32 tgaactggtc caaggcgtac tcggctaggg tgtttggtgg ttgccccac ccggtgcact 360
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34 atccagtacg accccatata cctgccatcg tagtgcccct aggcgcacat atgaccaca 480
35 tttggccccg atcgaaacgt cggcaccgcg tttcgggggc gatgcgcgcc aaacgatgta 540
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39 tattatatag caatatcata ctttgactaa ttataaacga aatatattac aatatgattt 780
40 ggtaaacggt gaggtggaaa aatgtataag agccgcctaa taattaatta ttttatgaat 840
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42 cgtgacggaa tttttcttaa aactaaatat taaaagcag ctattttcag atttttcgtg 960
43 gccaaagttt cttgcatact tatctatgcc catttttact tttatcgttc tagccttcta 1020
44 ggtacacggt tgaacataaa aaatcataaa aattgaaagt aaaaattagt tttttttttt 1080
45 catattactc gtagggatca tttgttagat caatctgaaa tatacaaacc attctgattt 1140
46 taaaatcaca accattctgc caaggggaag tctatgtgat ccgtgacaag tggtttgatt 1200
47 attcttagtc tagattggag tcacaacttt tagtgcaa atctattaaa agaacccta 1260
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/051,307

DATE: 05/02/2002

TIME: 15:52:27

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58 <212> TYPE: DNA

59 <213> ORGANISM: Solanum tuberosum

61 <400> SEQUENCE: 2

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64 caaatgtggt acaaggattg ttacatcctc cgggtacttt aagctgacta ggacattcac 180
65 cttttatatt tgccgtgcat tgaattgtgt ggcatttccc tccacttgga ttagtcgggg 240
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69 atccagtagc accccatata cgtgccatcg tagtgccctt aggcgcacat atgaccacac 480
70 tttggcctcg atcgagacgt cgggcaccgc ctatcgggtc gatgccgccc aaacgatgta 540
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78 tggccaaagt ctcttgcata cttatctatg cccattttta cttttatcgt tctagccttc 1020
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80 ttcatattac tcgtatggat catttgtagg atcaatctga aatatacaaa ccattctgat 1140
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82 attattctta gtctagattg gagtcacaac ttttagtgca aatatctatt aaaagaacct 1260
83 ctattgatgc aaatatctat taaaagaacc cctattcata ctttatttat ttttacgac 1320
84 ggagcatgga tatatttact aattaaaata aattgggagg aattgatoga caagccatca 1380
85 agcttatcgt cgatccacat taggataacg ttagtatggc tgtttttaga gaaacaagtg 1440
86 gatcatgtac aattgagtta aaaaatatct cctataaata cctgtctatc cctcttaaac 1500
87 caaatacatc taacacacaa aatataaact tagattcctt aaagaaattg cagaattaaa 1560
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1598

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91 <210> SEQ ID NO: 3

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93 <212> TYPE: DNA

94 <213> ORGANISM: Solanum tuberosum

96 <220> FEATURE:

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98 <222> LOCATION: (1248)

99 <223> OTHER INFORMATION: a, t, c or g

101 <400> SEQUENCE: 3

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104 taggacattc accatttata tttgccgtgc attgaattgc gtggcatttc cctccacttg 180
105 gattagtcgg ggcgaaagtc atcggtatat taaatccatc aactaaagaa atgtcccaga 240
106 aatctaagtt gttgaactgg tccgaggcgt actcggctag ggtgtttggc ggtttacccc 300
107 acccggtgca ctgcaggaca ccaccacaat caccagtcac gcacgaacct ctaccagcac 360
108 catcgaagtt acatccagta cgaccccata tacgtgccat cgtagtgccc ctaggcgcat 420
109 caatgaccca cgtttggcct cgatcgagac gtcggccacc gcctatcggg gtcgatgctg 480

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PATENT APPLICATION: US/10/051,307

DATE: 05/02/2002

TIME: 15:52:27

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 111 caaaagcaag aagggagaaa acaaaagaag atctcaagta gcccatgttt gttgaaattt 600
 112 atatgtggac aaattatttt tggactttta tatataggga tatggcggct tttggcacta 660
 113 tggatattaa tegtattata taacaatatc atactttgac taattataaa caaataatat 720
 114 tacaatatga tttggtaaac gttgaggtgg caaaatgtat aagagcggcc taataattaa 780
 115 ttatttttatg aatatagact atagttacaa gtgaacttta tttggtgata acttggacat 840
 116 ataaactctg tatcgtgacg gaacttttct taaaactaaa tattaataag cagctatttt 900
 117 aatatttttc gtggccaaag tttcttgcat acttatctat gccatttttt actttttatcg 960
 118 ttctagcctt ctaggtacgc gtttgaacat aaaaatcat aaaaattgaa agtaaaaatt 1020
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 120 attctgattt taaaatcata actattctgc atgatgggaa cgtctatggt gattcgtgac 1140
 121 aagtgtttga tttattctaa gtctggattg gagtcacaac ttttagtgca aatatctatt 1200
 W--> 122 aaaagaaccc ctatttgatg caaaagtcaa taaatattta atatcatnct ttattttattt 1260
 123 ttacgatcgg agcatggata catttactaa ttaaaataaa ttggaaggaa ttgatcgaca 1320
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 126 tctaaaacta aatgcactta acaacacaaa tataaactta gattctttaa agaaattgca 1500
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 133 <213> ORGANISM: Solanum tuberosum
 135 <400> SEQUENCE: 4
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 141 ccttcaaggg gaggttaagt tttttttttt ttttgaggtg tttgggaaag acaaaaaatg 360
 142 tttttaaaca ottattatta ggccaaaaag tataaaaaata aactaaaagc taaaagttag 420
 143 gtatgcccgga cttatgattt ttaactttta gcttataagc tacttaaga aagccaatcc 480
 144 aaacgacctg ttcttaggtg taagattttg aagactaagc aaattttatt tcatgaaaca 540
 145 acattgtttt tgttttagcga tatgccatta agtcgtttat gttctaatta atctggtttt 600
 146 gtaggctggt ttccatgcaa aatgtattcc agcagctagc agtttacagg agcatatagt 660
 147 taaatcaaca ccggcaagat atagtagtac acaggcatgt ttggaaaaat gaccatttct 720
 148 ggaactgata ataaaagggt aattttctgt tttactttct gaccactgga tctctttttt 780
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 151 aaaacaatgt atctccactt ttgcagggtc aagggtcagt atatgttggc acccttcact 960
 152 gctgggtggc aaagtactga tgtggatcct ttaattatag agaagtctga ggtagattt 1020
 153 atgtctactt ttgctgtcta acttaagaga agtttatata tctttcgtga tcaactttta 1080
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 158 <210> SEQ ID NO: 5
 159 <211> LENGTH: 1188
 160 <212> TYPE: DNA
 161 <213> ORGANISM: Solanum tuberosum
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RAW SEQUENCE LISTING

DATE: 05/02/2002

PATENT APPLICATION: US/10/051,307

TIME: 15:52:27

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165 tcaattttat aagaatttac agtctgcaact ctggagacac tcttatttca taatgtaata 120
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167 tgtgctatca tagttacttg ttttctgtta aggtaagatt ttattgacgt atatgggaaa 240
168 ttccttgtaa gagctgacac ggtaaaactgg acctaaataa atttagaact atgcaccacc 300
169 cctttaagga tgtttgatc gtcttatttt aagtagtttt gaacttttaa gcattttttt 360
170 ttttttggag gtgtttggga aagacaaaaa atgtttttta acacttatta ttaggccaaa 420
171 aagtataaaa ataaactaaa agctaaaagt tgggtatgcc cgacttatga tttttaactt 480
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178 aatgacatgg cttattattca tgagtattac tcgtcatatg tggaaatata ttcactcatt 900
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182 taacttaaga gaagtttata tatcttctgt gatcaacttt tacatttcga catagggatc 1140
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197 ggttctgctt ttacagaaga tttgagatgc aatagagttc gtctttttgt taatttattg 360
198 gacattgttg tacaaactcc caaagttggt taaacaaaat taattcatgt tataatatatg 420
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212 aagatatagt agtacacagg catgtttgga aaatgacatt tctggaactg ataataaagg 240
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214 tcttttaatt atagagaagt ctgagggatc ccacgtatat gacatgcaag ggaggaagta 360
215 tcttgatact ctagctgggt tgtggtgcac agcactaggg gggaacgagc ctgccttgtt 420
216 tgatgctgcc actaagcaat taaacacatt gccattttac cattcatttt ggaaccgtac 480
217 aacaaaacct tctttggatc ttgcgaagga gcttctggat atgtttactg caaagaaaat 540
218 ggcaaaagct tttttcacca atagtggatc agaagccaat gatacccagg tgaagctggg 600
219 ttggtattat aacaatgctc ttggaaggcc aaacaaaaag aaatttatag ctgagcaaaa 660

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221 aaattttgat ctctctgctc catttggtct tcacaccgac tgtcctcatt attggcggtta 780
222 tcatctgccca ggtgagacag aggaggagtt ctctaccaga ttggctaaaa atttggaaga 840
223 tcttatcctc aaagaggggc ctgaaacaat agctgcttcc attgctgaac cagtcagtgg 900
224 ggcaggaggt gtcatacctc ctccagctac ctattttgat aagattcaag ctgtagtgaa 960
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235 aactgaaaag agagtagaag aactcaagtc tcagaagtga tattagtga cagcacaagc 1620
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247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
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260 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/051,307

DATE: 05/02/2002
TIME: 15:52:28

Input Set : A:\59440141.app
Output Set: N:\CRF3\05022002\J051307.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 1248

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/051,307

DATE: 05/02/2002

TIME: 15:52:28

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L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1200